DOCUMENT RESUME

ED 447 891 JC 010 059

AUTHOR	Rabusicova, Milada; Pol, Milan
TITLE	Diversification of Czech Higher Education: Set Up and Development of Higher Vocational Colleges.
PUB DATE	1998-09-00
NOTE	16p.; Presented at the European Conference on Educational Research (Ljubljana, September 1998).
CONTRACT	OSI/HESP-293/1997
PUB TYPE	Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Access to Education; *Educational Change; Educational Innovation; Foreign Countries; *Postsecondary Education; *Transitional Schools; *Vocational Education
IDENTIFIERS	*Czech Republic

ABSTRACT

The report provides information on the Higher Vocational Colleges (HVCs) in Czech school system. The researcher supports the opinion that HVCs belong to the tertiary sector in Czech Republic (together with universities and with other officially recognized higher education institutions). Out of 100 secondary vocational schools a group of 12 institutions was selected for transformation project in 1991. Today, 160 HVCs operate in Czech Republic. This report describes a study of those institutions in order to determine whether they are closer to secondary or tertiary education, and to attempt to divide them into sub-groups with common characteristics. Nineteen criteria were developed. According to the quality of their performance and to their development aspirations, these HVCs can be divided into three groups: 1) about 10 HVCs seem to have a potential to become non-university higher education institutions: 2) about 80-90 emphasize HVC's position within the education system between secondary and higher education; 3) the rest are not much different from currently existing secondary vocational schools. HVCs have been viewed as a new chance for many secondary school leavers to further their studies. A number of factors are hindering the firm set up and steady development of HVCs in Czech Republic. (JA)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 447 891

ECER 98

European Conference on Educational Research
Ljubljana, September 1998

Diversification of Czech higher education: set up and development of Higher Vocational Colleges*

Milada Rabušicová
Milan Pol

Masaryk University
Brno, Czech Republic

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

M. Rabusicova

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

FC010059

* This work was supported by the Research Support Scheme OSI/HESP, grant No.: 293/1997.

BEST COPY AVAILABLE

A position of Higher Vocational Colleges among other educational institutions

Higher Vocational Colleges[1] (HVCs) have been set up as an entirely new type of educational institution in Czech school system. It may not be easy to classify them within it, though. There has been a belief that HVCs will gradually get a firm position in the non-university higher education sector (which did not exist before). Yet HVCs have often been closely linked with secondary vocational schools out of which they derived. As a consequence, they do not really always seem to fit into the higher education sector. Quite a few of the HVCs still rather resemble - at least in some aspects of their work - an element of post-secondary education (which used to offer courses leading to second secondary school leaving exams). ISCED categories suggest that HVCs can be placed at "the level 5" - the one related to the tertiary sector. The conception of more diversified tertiary education still has not been, however, universally accepted in Czech Republic. We support the opinion of those experts (i.e. Čerych, 1997) that emphasise that HVCs belong to the tertiary sector in Czech Republic (together with universities offering bachelor, master, and doctoral degree studies, and with other officially recognized higher education institutions).

The set up and current situation of HVCs

In 1991, first HVCs have been set up in Czech Republic. Out of 100 secondary vocational schools a group of 24 institutions was selected for transformation project. The half of them (12) then really took part in the respective project. The Ministry of Education supported the project and the first group of 12 HVCs was provided with an experimental status. Selected representatives of the first HVCs received training in the Netherlands (Tillburg and Eindhoven). The first group of 12 HVCs created the CASPE (Czech Association of Schools of Post-secondary Education) which was later transformed into the Union of Schools of Higher Education Studies (USHES). Another 7 HVCs joined the first group of 12 slightly later. This way, the experiment with HVCs was launched at 19 secondary vocational schools. In its first phase, the experiment was significantly supported by Dutch partners (HBO), and financially backed by the EU. In this project viewed as "higher education studies transfer technology", foreign partners participated in curriculum development, in the development of criteria for evaluation, and in other areas.

---

[1] Czech name of these educational institutions has been translated into English in several ways. In this paper we use the term Higher Vocational Colleges, although we are well aware that particularly the term Higher

In 1991-1995 period every secondary vocational school had the opportunity to submit its proposal for transformation into HVCs. These proposals were evaluated by the Vocational Education Research Institute, Prague (VERI) . According to the representatives of USHES (mainly advocating interests of 19 existing HVCs), there was a tacit agreement between them and the Ministry of Education about a total number of HVCs which should be given a chance to be set up and work. They claimed, this number amounted up to approximately 40 schools. The interest of secondary vocational schools to set up HVCs was much higher, though. Among main reasons for it there seemed to be a decreasing number of students at secondary schools (caused by demographic trends as well as by legislative changes ceasing courses which would lead to second secondary school leaving exams).

The USHES experts believe that the Ministry of Education broke a tacit agreement down at a certain point. In June 1995, the School Act amendment came into the force and this way the experimental phase of HVCs existence ended. The 1995 School Act enabled to set up a vast number of new HVCs. Consequently, in 1996 the Ministry of Education approved 164 proposals for setting up new HVCs (out of 200 proposals submitted). The process of proposals' evaluation was largely criticized especially by the USHES. Only in 1997 there have been introduced standardized procedures of the evaluation of project proposals. According to them, the Vocational Education Research Institute evaluates submitted pedagogical documentation of the whole HVC's study program, or of a single new study branch proposed by the HVC. Since 1997, about 300 project proposals have been evaluated this way. The evaluation result becomes a basis for the Ministry's decision whether to include the HVC (or its new branch) into the HVCs' network or not. The quality of HVCs' performance is currently being evaluated by the Czech school inspection, too (so-called "thematic inspections"). In last 2 years, about 100 HVCs have been inspected this way.

At the moment, 160 HVCs operate in Czech Republic. There is widely spread belief (especially among experts from the USHES) that according to the quality of their perfomance and to their development aspirations, these HVCs can be arbitrarily divided into three groups:

1. About 10 HVCs which passed the EVOS[2] evaluation and which seem to have a potential to become non-university higher education institutions. In order to manage that,

---

Professional Schools has been used, too. In German language there seems to be more adequate use of the term Hohere Fachschulen, than the term Fachhochschulen.

[2] EVOS = Czech abbreviation for Evaluation of Higher Vocational Studies, the project of evaluation and certification of higher vocational studies. It aims to set up a system of regular evaluations of HVCs and their study branches. This idea first came from the USHES in 1995. In 1997, there have been worked out

these HVCs will have to go through the process of accreditation. The details of the whole transformation process are currently being worked out both by the Ministry of Education, and by the USHES. New Higher Education Act (May 1998) does provide the opportunity for setting up new types of higher education institutions. Clearly, there is a chance for these schools to meet their ambitions.

2. Those HVCs which make their effort to improve their performance in order to distinguish themselves sufficiently from ways and conditions of work existing typically at secondary vocational schools. These HVCs do not intend to become a part of non-university higher education sector. They emphasise specific position of HVCs within the education system - the one between secondary and higher education. It is being estimated that there are about 80-90 of these HVCs. Mostly they are of a smaller size, specifically profiled as for the study branches and/or firmly anchored in their region (which is often typical with a limited number of other study opportunities available).

3. The HVCs which might be labeled as institutions pretending new, higher quality offer, yet in the reality they very much resemble formerly existing secondary vocational schools which used to provide courses leading to second secondary school leaving exams. These HVCs are not very much different from currently existing secondary vocational schools either.

Reasons for the set up of HVCs

A number of reasons for the set up of HVCs in Czech Republic can be point out.

Among the internal ones, a high level of students' interest in higher education studies and limited possibilities of higher schools to enroll more students for the studies (every year almost a half of a total number of applicants is being refused). HVCs have been viewed as a new chance for many secondary school leavers to further their studies.

The demographic trends sharpened "a fight for the student (and money)" among secondary vocational schools, especially after a cease of traditionally existing chances to offer graduants of gymnasia their second secondary (vocational) education chance.

It was also hoped that by establishing HVCs the general (comprehensive) secondary education stream will be strenghtened, as vocational education will be moved up to the tertiary sector in case of larger number of study branches (especially in health care, economy,

---

methodical guidelines for the work of evaluative commissions. Until now, the HVCs have not been obliged to undergo this evaluation, but they can ask for it. The objectivity of the evaluation is guarranted by the EVOS

financies, etc.). This step was expected to enable students to postpone their choice (after passing secondary school leaving exams at gymnasia). This way, the proportions between general and vocational secondary and post-secondary education should also get closer to what is considered as a standard in developed countries.

Finally, HVCs were hoped to improve the distribution of education opportunities across the regions.

As for the external reasons for the HVCs' set up, quantitative indicators of student numbers in the tertiary sector and a low proportion of higher education graduants in their "productive age" within the whole population played their important role. The comparions of Czech situation with the one in OECD countries (figures No. 1;2) suggest clearly the urgency of a change. This is despite to rapidly growing numbers of students at all higher education as well as tertiary institutions in recent years.

Figure No. 1: Numbers of students at higher schools (HSs) and higher vocational colleges (HVCs) and indexes of their growth

Type of the study	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97
HSs	110 021	115 072	110 883	115 132	123 523	133 342	145 148	162 402
Index of growth 89/90 = 100	100	104,6	100,8	104,6	112,3	121,2	131,9	147,6
HVCs				1 391	2 438	4 631	6 302	14 931
Index of growth 92/93 = 100				100	175,3	332,9	453,1	1 073,4

Source: Institute for the Information in Education; authors' calculations.

Figure No. 2: A percentage of participation in tertiary sector according to age groups in Czech Republic and in OECD countries

	18 - 21 years	22 - 25 years	26 - 29 years
Czech Republic	14,8%	7,6%	1,5%
Average in OECD countries	21,5%	15,3%	6,6%

Source: OECD, Education at a Glance, 1996.

Project Board in which representatives of different branches and other experts take part.

Another impuls for the change was the process of diversification of the tertiary education which has taken place in many European countries mainly from 1970s. Czech ambition to join the EC clearly raised the need to reflect developments in the countries mentioned.

It seems to be evident that it would be necessary to support the development of the tertiary sector in the Czech Republic by paying specific attention to all the three groups of HVCs mentioned. At the same time, the development of productive communication and cooperation among all HVCs should be emphasised and supported. It seems that their fragmentation into groups does not make it easier. Consequently, neither the potential of "the most experienced" HVCs, nor the positive experience of the others seem to be fully made use of. The existence of two HVC networks (USHES and its alternative, the Association of HVCs) also seems to divide "the world of HVCs" (at least) into two parts.

At the moment, there seems to be a number of factors hindrancing the firm set up and steady development of HVCs in Czech Republic. Among the main ones there are:

- HVCs are under the force of basic and secondary school legislation (1996 School Act). Consequently, they face many limitations in their work. These concern, for instance, teaching load requirements (equally amounted as in the case of secondary school teachers), firmly set a number of teaching hours per week, student obligatory attendance at classes, etc.
- Particularly a part of HVCs seems to be too strongly interrelated with secondary vocational schools which they were derived from. In many cases there is even strong physical co-existence: these HVCs and secondary vocational schools use the same buildings, employ same teachers, adopt same study and work regulations and very similar conditions for students, etc.
- General lack of clarity about the place HVCs should get within the education system; the fact that in times of HVCs' setting up there were ceased courses leading to second secondary school exams confused the public - it often tends to consider HVCs as "only re-named" institutions of the same mission, as had the latter ones. This confusion can even be observed within a part of the HVCs' staff.
- HVCs are often viewed "from the outside" as a homogenous group of institutions; the differences among them are still being ignored.
- Higher school representatives seem to be worried about the integration of HVCs into the system of higher education institutions. These worries seem to have especially financial

motives (a lack of finances available has generally been felt in higher education for a long time).

Research questions and methodology

Our 16-month research project was divided into two parts. In the first we aimed to find out the starting position of the HVCs in Czech Republic and to evaluate their current position within Czech education system. In the second part there will follow a detailed discretion about supportive as well as hindrancing factors of the HVCs' development.

In this paper we report about some results of the first phase of the research project. This has been methodologically based on the study of documents and legislation concerning HVCs, on non-standardized interviews with experts in the field, and on exhaustive questionnaire inquiry[3] conducted at all HVCs operating in Czech Republic.

We were focused on two research questions:

1. Using selected criteria, can we see currently existing HVCs placed closer to secondary schools or to higher schools?
2. Using selected criteria, can we divide currently existing HVCs into groups of institutions of similar features?

We have chosen 19 criteria which may render, as we believe, significant differences between secondary and higher school education. These criteria concern three areas: organization of the study, teaching staff and its performance, and material (information) basis of the school. We have not been looking at the very content of study programs, as it is only being constituted. Moreover, many HVCs started up very recently and they still do not have their first graduants.

Figure No. 3 shows individual criteria and also the dichotomy of the secondary (SS) and higher school (HS) type of the study.

Based on the criteria, we created 4 indexes, and worked with them further:

1. IND_ALL = Index of all the indicators (19 criteria)

[3] In April 1998 we submitted the questionnaire to directors of all 160 HVCs existing in Czech Republic. We have received back 107 filled in questionnaires. Rate of return = 67%.

2. IND_ORG = Index of organization of the study (7 criteria)
3. IND_PERS = Index of the teaching staff area (6 criteria)
4. IND_MAT = Index of material (information) basis (6 criteria)

Figure No. 3: Criteria for locating HVCs either closer to SS or to HS type of study

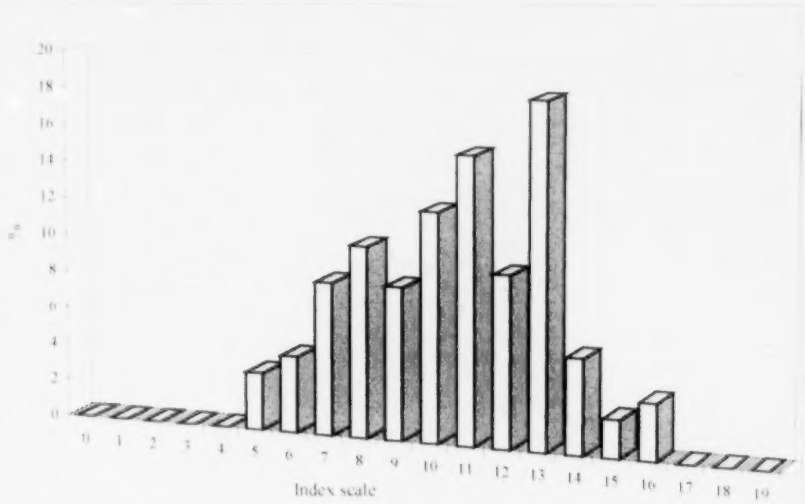
	SS type	HS type
Organization of the study		
% of obligatory subjects taught	98-100%	less than 98%
% of optional subjects taught	less than 25%	25% and more
a number of teaching hours per week	more than 28	28 and less
the obligatory daily attendance	Yes	no
the existence of the credit system	No	yes
the existence of lectures and seminars	No	yes
the extent of students' final theses	40 pages or less	more than 40 p
Teaching staff		
% of teachers teaching paralelly at the secondary school	50% and more	less than 50%
% of teachers teaching paralelly at the higher school	0%	1% and more
research and publication activity	is not requested	other cases
consultations with students as a part of the teaching duty	no	yes
participation of teachers at the decision making	no	yes
participation of students at the decision making	no	yes
Material (information) basis		
the existence of the library	no	yes
a number of volumes in the library	less than 5000	5000 and more
accessible study/reading room	no	yes
accessible computer room	no	yes
the existence of the Internet	no	yes
access of students to the Internet	no	yes

Results

1. **Using selected criteria, can we see currently existing HVCs placed closer to secondary schools or to higher schools?**

Following diagrams show the distribution of HVCs according to the particular indexes.

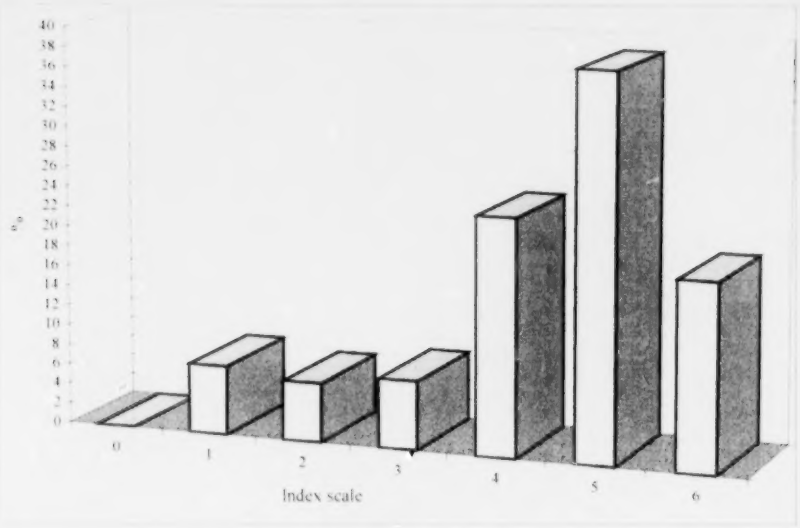
Figure No.4: Index of all the indicators (19 criteria)



The distribution of HVCs according to the index of all the indicators (IND_ALL) is highly irregular (which suggests an existence of an underlying structure). We suppose this distribution is determined with the fact that the index of all the indicators is created by 3 dimensions which do not correlate with each other (Pearson R=0,10 for IND_ORGxIND_PERS, 0,13 for IND_ORGxIND_MAT, -O,01 for IND_PERSxIND_MAT). That is why it has a sence to work also with particular indexes (of which the index of all the indicators is composed).

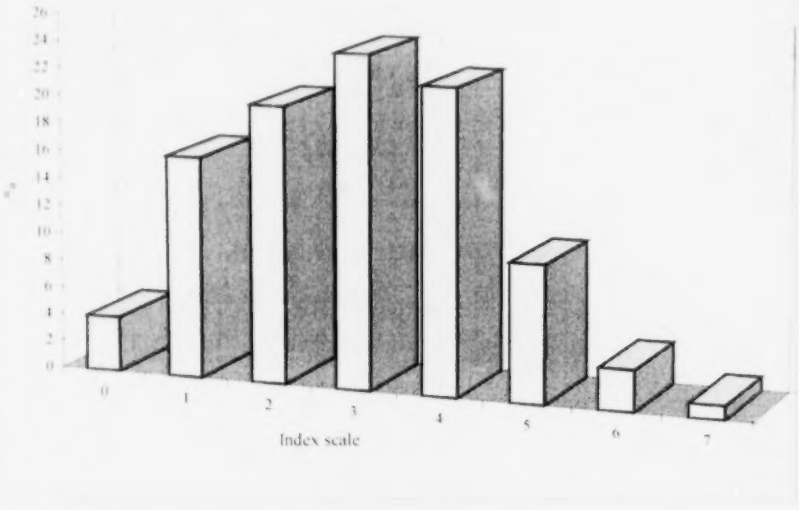
Figure No. 5: Index of material (information) basis (6 criteria)

BEST COPY AVAILABLE



The diagram suggests that material (information) basis of the HVCs concerned is a good one and is close to standards applied to higher schools. We assume, the main reason is that HVCs were usually set up on the basis of well established secondary vocational schools, and most of them are still closely linked to these schools - even physically (shared buildings, commonly used material and information basis, etc.). As a positive consequence, newly set up HVCs have at their disposal the materials and equipment which they would otherwise hardly build up that quickly.

Figure No. 6: Index of organization of the study (7 criteria)

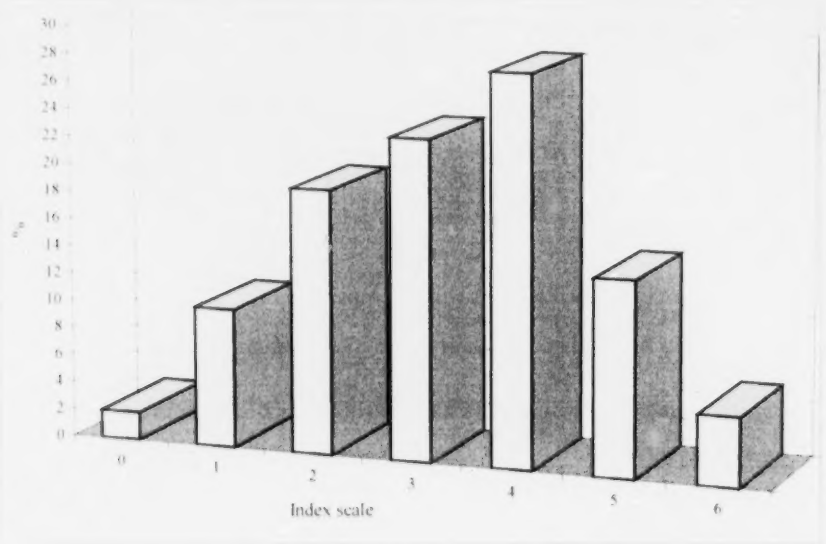


BEST COPY AVAILABLE

The distribution according to the index of organization of the study shows, on the contrary, that most of existing HVCs are still closer to secondary schools, rather than to higher schools. We believe, such a distribution reflects a current legislative situation treating HVCs as they were basic or secondary schools. Consequences of it have already been mentioned earlier. Neither the impact of a long-term experience of many HVCs' teachers with the work at secondary schools can hardly be ignored in the connection with the organization of the study at HVCs.

Although very close links between HVCs and secondary vocational schools were perceived as logical ones, they seem to play negative role in the area of teaching staff, too. They might hinder adequate HVCs' development in the visible future. For instance, it can be difficult for teachers teaching paralelly at both types of the schools to distinguish sensitively enough in their daily work between the different demands of the work at each of the school type.

Figure No. 7: Index of teaching staff area (6 criteria)



The experts we worked with estimated the ratio among three groups of HVCs mentioned (distinguished according to their maturity and tendency towards either secondary or higher schools) as follows: 41% : 53% : 6%. In absolute numerousness it amounts 60-70 HVCs which only seem to be "re-named" formerly existing secondary schools, 80-90 HVCs striving for "higher level of performance" than offered by secondary vocational schools (yet not having ambitions to become a part of higher education sector), and 10 HVCs tending to become a type of higher education institution. Our research gives precision to this estimation:

BEST COPY AVAILABLE

7% : 83% : 10%. Our findings suggest there are significantly more HVCs which remain in the position of the very HVCs and much less of those that are still close to secondary schools (as for the nature of their work). The findings on schools striving to become a part of higher education sector do not differ very much from original estimations of the experts.

2. Using selected criteria, can we divide currently existing HVCs into groups of institutions of similar features?

In this phase, we were interested which HVCs have their characteristics (linked to the study branches offered, founder of the school, the length of the school's existence, etc.) expressed by three indexes (IND_ORG, IND_PERS,IND_MAT) and which are getting closer either to secondary or higher school type.

Figure No. 8: Indexes for HVCs according to study branches

HVCs according to study branches	**IND_ORG**	**IND_PERS**	**IND_MAT**
health care	2,1	3,6	4,6
economics	**3,5**	3,3	4,6
agriculture	3,3	2,3	**5,1**
technology	3,2	3,1	4,8
humanities and education	3,4	**3,8**	3,8
Arts and sports	**1,7**	**2,9**	**3,1**
HVCs - a total average	**2,9**	**3,3**	**4,4**

Figure No. 9: Indexes for HVCs according to their status

HVCs according to their status	**IND_ORG**	**IND_PERS**	**IND_MAT**
State	2,9	**2,9**	**4,7**
Private	**2,8**	**4,4**	3,5
Church	**3,0**	4,0	**2,8**
HVCs - a total average	**2,9**	**3,6**	**4,4**

Figure No. 10: Indexes for HVCs according to their form of existence

HVCs according to their form of existence	**IND_ORG**	**IND_PERS**	**IND_MAT**
an independently existing subject	2,3	4,3	3,8

a subject existing together with secondary vocational school	3,1	3,0	4,5
HVCs - a total average	**2,9**	**3,3**	**4,4**

Figure No. 11: Indexes for HVCs according the year of their set up

HVCs according to the year of their set up	**IND_ORG**	**IND_PERS**	**IND_MAT**
until 1995/96	3,0	3,4	4,6
since 1996/97	2,9	3,2	4,3
HVCs - a total average	**2,9**	**3,3**	**4,4**

As for the organization of the study, it seems that HVCs offering study branches in economics, and humanities and education appear to be most closely to the way higher schools organize their study. On the other hand, artistic and sports HVCs seem to be the closest to the secondary school way of organization of the study.

In case of the teaching staff, the situation closest to higher schools seems to be at humanities and sports HVCs as well as at the ones offering study in health care. These HVCs and also the ones oriented on economics and especially on agriculture seem to have the most satisfactory material and information basis at their disposal.

As for the HVCs' status, our findings suggest there is slightly more freedom in organization of the study at church HVCs than at other HVCs. The advantage concerning more sounding teaching staff seem to have private and church HVCs, while state ones do seem to have better material and information basis at their disposal.

Surprisingly enough, those HVCs which institutionally co-exist with secondary vocational schools seem to be more flexible and adequate in their organization of the study, than the ones existing independently. The "independent" HVCs seem to be in better situation with the teaching staff, than the other group of HVCs, though.

As for the organization of studies, the situation seems to be relatively similar at both "younger" HVCs, and the ones set up until 1995/96 academic year. In the case of teaching staff, "older" HVCs seem to be little advantaged. The same concerns a case of material (information) basis of schools.

Conclusions

HVCs have undergone a differentiated way of development and it would be inappropriate to look at them as a homogenous group of institutions. There are different aspirations as well as ways and conditions of work at different HVCs. Our research findings suggest that using selected criteria enables us to specify some of the differences between HVCs and also among their groups, and to determine how close/distant these schools' ways and conditions of work were to/from higher/secondary schools' ways and conditions of work. These differences can be found in the area of organization of the study, teaching staff as well as material (information) basis.

Our findings also suggest that grouping of HVCs seems to be rather close to the one done intuitively by experts of the USHES. As a result of our research, we can specify the differences among the groups in a more detailed way and also indicate proportions among the groups more exactly. We have also found differences among HVCs work and working conditions, with regard to the study branches, HVCs status, form of their existence, and the length of their existence. Especially the differences among the three groups of HVCs, as indicated above, clearly suggests further developmental potential as well as needs of the tertiary sector in Czech Republic.

There seems to be a long way for development of effective system of HVCs as a part of the tertiary education sector in Czech Republic. Most of currently appearing hindrances to this clearly point at the challenge for the whole Czech society: to change the attitude towards higher education, to move from elitism towards openness.

To outline general implications, we will still need to analyse more deeply the context of the HVCs' set up and development. A detailed discretion about supportive as well as hindrancing factors of the HVCs' set up and development is the main focus of the second phase of our research.

Literature

Čerych, L. (1997) Diverzifikace terciárního vzdilávání *(Diversification of the tertiary education)*. OECD, Prague.
EVOS (1997) Metodické pokyny k evaluaènímu oizení na vyšší odborné škole *(Evaluation of Higher vocational studies)*. Sdružení škol vyššího studia, Prague.
OECD (1996) Education at a Glance. OECD, Paris.
OECD (1991) Alternatives to Universities. OECD, Paris.

OECD (1997) Thematic review of the first years of tertiary education. Draft report of the international seminar "Mass Tertiary Education: The Diversification Response". OECD, Prague, 11-13 November 1997.
Personal interview with J. Filipec, Chair of the USHES, June 10, 1998.
Statistická ročenka školství 1995, 1996 (1996, 1997) *(Statistical yearbook of education 1995, 1996)*. ÚIV, Prague.